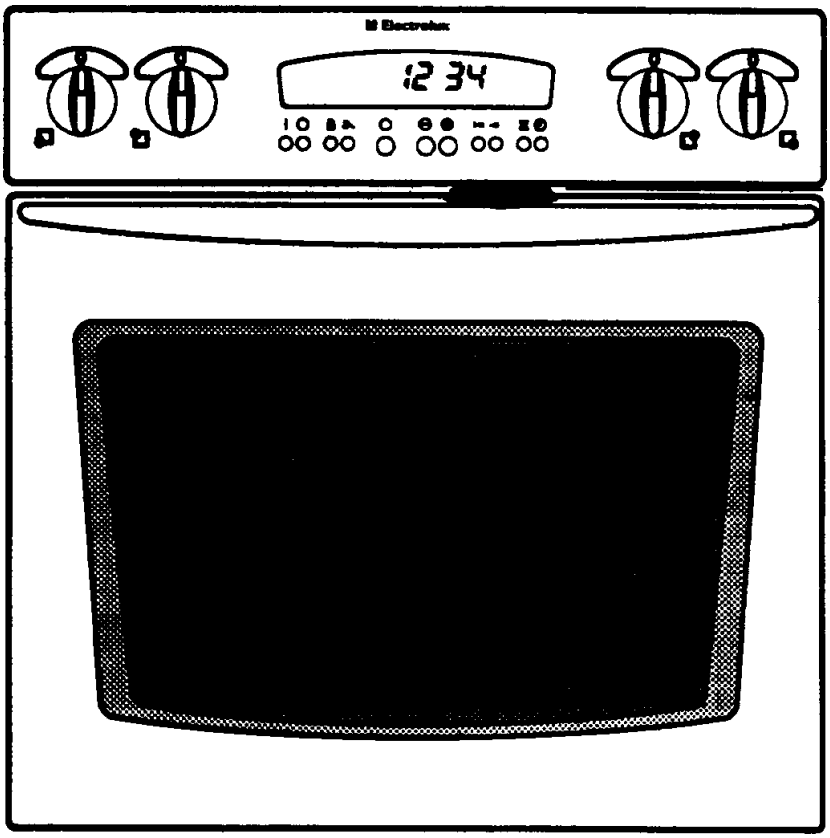
Electrolux

Technical Support Europe

SERVICE MANUAL

EURO OVEN



WOEC

Test program

© AEG Hausgeräte GmbH
Muggenhofer Straße 135
D-90429 Nürnberg
Germany

Fax +49 (0)911 323 1420

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Safety instructions

Attention

- Please observe the applicable safety requirements according to DIN/VDE 0701 (concerning repairs) and VDE 0700/ICE 355 respectively VDE 0860/IEC 65 (concerning type of product)!
- Components to IEC or VDE guidelines! Only use components with the same specification for replacement!
- Controls with MOS components use only components with the same specification.
- Observe MOS components handling instructions when servicing!

Recommendation for service repairs

- Use only original spare parts.

  With components or assemblies accompanied with the Safety Symbol ⚠ only original-spare parts are strictly to be used.
- Use only original fuse value.
- Pay attention to ratings and power data of components and protective devices.
- Safety compliance, parts of the product must not be visually damaged or unsuitable. This is valid especially for insulators and insulating parts.
- Mains leads and connecting leads should be checked for external damage before connection. Check the insulation!
- The functional safety of the tension relief and bending protection bushes are to be checked.
- Thermally loaded solder pads are to be suck off and re-soldered.
- Ensure that the ventilation slots are not obstructed.

1. General technical information

1.1 User technical data

	Capacity	/	Voltage
Oven heater (heating element)			
Heating element bottom	1000 W	/	230 V
Heating element top	1000 W	/	230 V
Heating element grill	1900 W	/	230 V
Heating element circulating air	2400 W	/	230 V
Fan			
Motor circulating air	35 W	/	230 V
Querstromlüfter	16 W	/	230 V
Lighting			
Oven lamp rear	25 W	/	230 V
Oven lamp lateral	25 W	/	230 V

Dimensions

appliances dimensions

Height	mm	579
Width	mm	592
Depth	mm	566

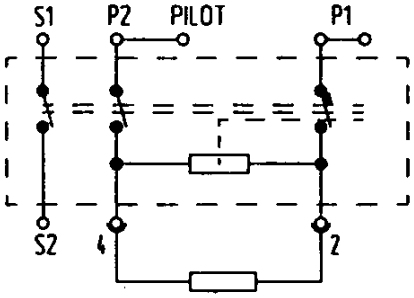
Built in dimensions

Built in hight	mm	579
Built in width	mm	540
Built in depth	mm	546

1.2 Hot plate controls

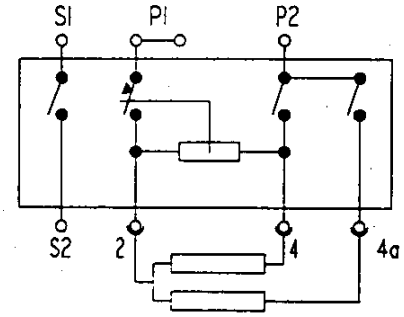
Circuit diagram of energy regulator 1

Circuit diagram for “OFF” position



Circuit diagram of energy regulator 2

Circuit diagram for “OFF” position

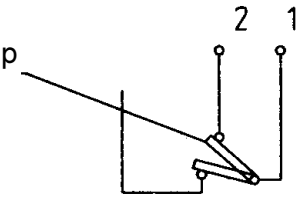


1.3 Oven control

Circuit diagram of oven thermostat

Circuit diagram for “OFF” position

Can also be closed at left stop



Some appliances are equipped with an electronic oven control (Thermotronic). See Chapter 1.4 for further details.

1.4 WOEC test programmes and their application

The control is provided with various test programmes, some of which can be switched on manually or run automatically in the background.

Safety cut-out

The appliance is equipped with a safety circuit which switches it off automatically if the allocated time intervals are exceeded at various temperature settings without the functions or temperature setting being changed. This time interval is smaller the higher the selected temperature.

Examples:
up to 250 °C 3 h
up to 230 °C 6 h
up to 120 °C 12 h

Self-test

The automatic test programme which runs permanently in the background carries out a self-test at regular intervals to monitor for correct operation of the appliance. If any deviation from the specified parameters is detected during this test, the service symbol and a 3-digit service code are shown in the display.
In addition, the appliance is switched on via safety relay K60 and the cooling fan via K61.
The cooling fan cannot be switched off on the appliance as long as the above-mentioned self-test detects the fault. The only possibility of switching off the cooling fan is to remove the fuse in the house electrical installation.

Service test

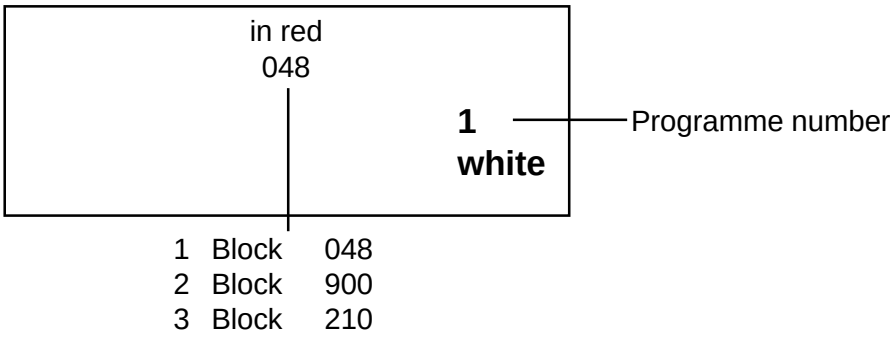
The manual test system for the control comprises 6 test programmes. Access to these 6 test programmes is only possible if the control is in a fault mode and displaying the current fault or the time is flashing.
This is achieved directly after connecting a voltage. If the test programmes are to be accessed during operation, the appliance must be disconnected from the mains for at least 10 s.

Descriptions of programme 1 - 6

Basic setting

1 - Time flashes or current fault is displayed.
2 - Press quick timer button and button I simultaneously and keep pressed for 5 s.
3 - The programme number appears in the right of the display and can be set to 1-6 using the quick timer button.
If the programme number has been preselected and no entry made for 5 s, the control switches to the preselected test programme.
4 - Once a test programme has been executed, this programme can be quit by pressing the Off button.
5 - See 1 for switching on the test programme.

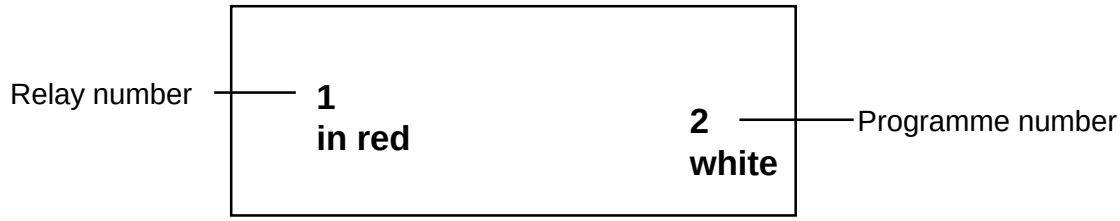
Programme 1



The 9-digit code which appears in 3 successive blocks of 3 digits each is the version number of the appliance. This code indicates the E number of the appliance.

Example: Version 048 900 210 Replace the first digit 0 with 9
948 900 210 Thermotronic JUNO JEH 5690 B

Programme 2

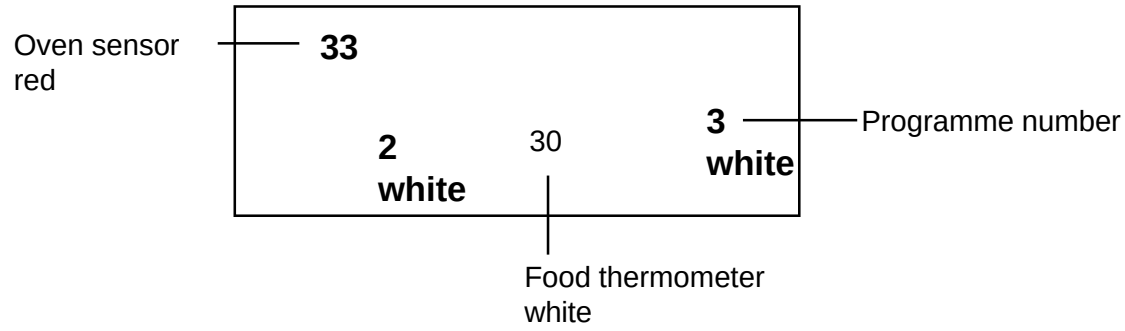


In this programme, the individual relays in the relay unit can be switched on and off by pressing the quick timer button. The relevant relay can be selected by pressing the **Cooking time** and **End of cooking time** buttons at the same time. Max. 10 or fewer relays can be selected, depending on the assignment.

Attention! If the load is switched on, the switch-on time should be **kept short** as neither the cooling fan nor the hot air ventilator are running and excessively long switch-on times can cause damage.

1	Cooling fan	K 61	16 W	0.07 A
2	Ring heater element	K 62	2400 W	10.43 A
3	Not equipped			
4	Grill	K 64	1900 W	8.26 A
5	Not equipped			
6	Not equipped			
7	Not equipped			
8	Circulation fan motor	K 68	35 W	0.15 A
9	Bottom heat	K 69	1000 W	4.35 A
10	Top heat	K 70	1000 W	4.35 A

Programme 3 - see basic setting 1 - 5



Programme 3 shows the temperature of the oven sensor and the food thermometer (if inserted).

Note! The two temperatures normally differ because different measuring points are used.

Programme 4 - see basic setting 1 - 5

If the power supply is disconnected after detecting the fault, the information is deleted and fault code 000 appears on executing test programme 4.

If a fault has been detected but the cause of the fault no longer exists (temporary fault) because the temperature has dropped or the cooking thermometer has been disconnected from the socket, the relevant fault code is stored in the memory and can be read out via test programme 4 as long as the power supply is not disconnected.

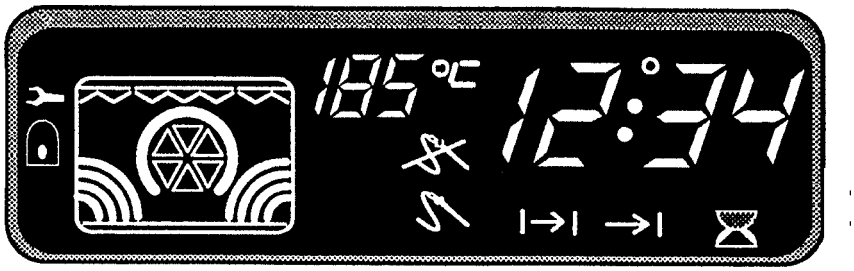
Fault reports for programme 4

Functional description:

When this module is activated, it handles all the faults present and carries out an EEPROM check. As soon as a fault occurs, a fault register has access to the main processor control loop. This causes the control to switch from the current status to the fault mode (except when in the test mode): If a new fault occurs which has a higher priority than the preceding fault, only this higher fault code is displayed. The last fault occurring with the highest priority is stored and can be displayed by Service Test Mode 4 at any time. The fault with the highest priority is the EEPROM control fault »F«.

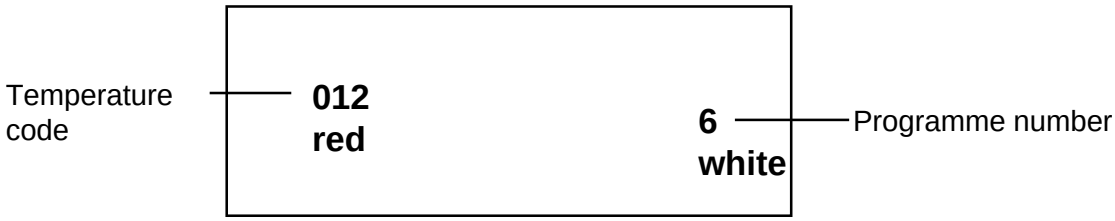
Fault code	Type of fault
000	No fault
001	Food thermometer open-circuit $\propto \Omega$
002	Fodd thermometer short-circuit Ω
003	Appers when an attempt is made to switch on the appliance again in spite of fault code display 002 odr 003. Fault in safety circuit.
004	Appers when the child safety system is to be switched on but the circuit is faulty
005	Not used
006	The temperature measured by the oven sensor exceeds the temperature set by the programming unit
007	Other tests of the oven probe and display board probe, excluding disconnection and short-circuit (test fault)
008	Thermostat on the board has operated
009	Thermostat on the board is short-circuit
00 A	Thermostat on the board is open-circuit
00 B	Not used
00 C	Not used
00 D	Oven sensor is short-circuit
00 E	Oven sensor is disconnected
00 F	EEPROM fault (microprocessor)

Programme 5 - see basic setting 1 - 5



This programme starts a display test in which all the symbols and the individual bars of the 7-segment displays are tested.

Programme 6 - see basic setting 1 - 5



This programme displays the temperature measured by the thermostat on the control unit in hexadecimal code (see tables).

HEX	Control unit thermostat
001	-30
002	-25
003	-15
004	-10
006	-5
007	0
009	5
00B	10
00E	15
012	20
016	25
01A	30
020	35
026	38
02C	45

HEX	Control unit thermostat
034	52
03C	55
045	60
04 E	65
058	70
062	75
06C	80
076	85
080	90
08A	95
093	100
09C	105
0A4	110
0AC	115
0B3	120

Fault-finding

Fault-finding is simplified by fault code test programmes. Faults which do not constitute a direct danger to the user are not detected by the control, e.g. disconnected heaters. The test programmes still provide help in fault-finding, even if the faults are not detected.

Fault-finding using fault codes

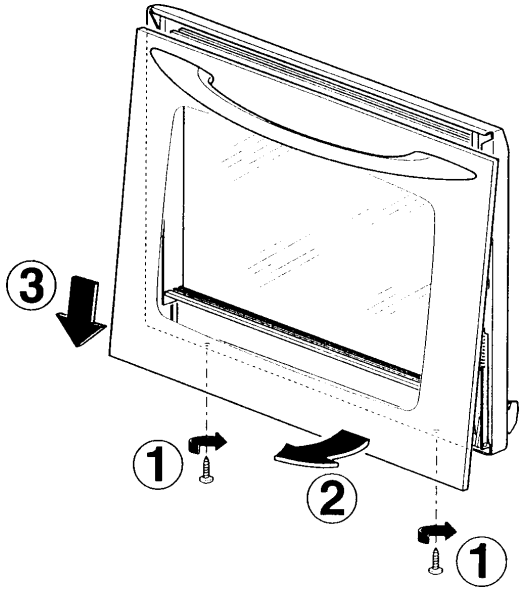
Fault code	Description
000	No fault detected
001	Replace food thermometer
002	Check food thermometer cable connection
003	Replace food thermometer
004	Check food thermometer cable connection· Disconnect mains and run test programme 4 for fault-finding· Replace power board • Disconnect mains and run test programme 4 for fault-finding • Replace power board
005	Code not used
006	• Switch on test programme 2 for testing the relays as the overtemperature can be caused by the relay contacts of a heater supply relay sticking· Possibly replace power board • Possibly replace power board
007	• Replace oven sensor· Replace display board
008	• Switch on test programme 2 for testing the circulation fan relay as the overtemperature can be caused by a fault in the circulation fan Check for proper operation of the relay concerned; replace the power board if the relay is faulty· Check the wiring • Check for proper operation of the relay concerned; replace the power board if the relay is faulty • Check the wiring
009 00A	Replace control unit board and display
00B 00C	Code not used
00D 00E	• Check wiring of oven sensor • Replace oven sensor
00F	Replace control unit board and display

Note! **Fault code 003 can also appear for an incorrect switching sequence. To switch back to normal operation, first press the O button and then the I button.**

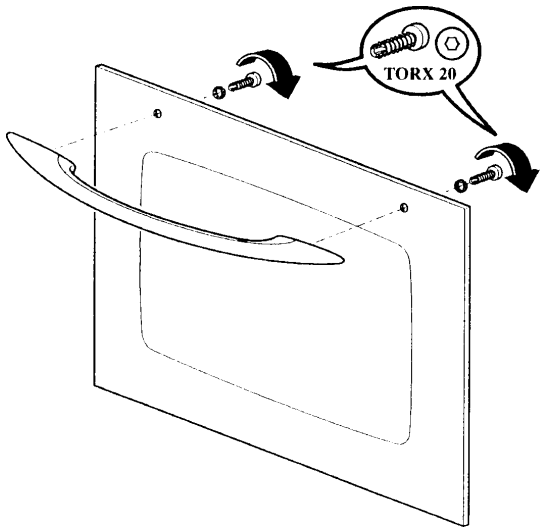
2. Service instructions

Dismantling front glass oven door and door handle

Remove the screws (1), one each on left and right, withdraw the door glass to the front (2) and then downwards (3).



When dismantling the oven door handle of an appliance with a plastic door handle, note that this is fixed with two special Torx screws (see diagram).



Important!
When refitting the switch panel after dismantling it, ensure that the rubber gasket between the air duct and switch panel is properly mounted.